



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,991	10/15/2001	Neil John Hursey	01.060.01	9572

23117 7590 09/08/2005

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

TO, BAO TRAN N

ART UNIT	PAPER NUMBER
----------	--------------

2135

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/975,991		HURSEY ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Bao Tran N. To		2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/15/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

*RD*

### **DETAILED ACTION**

1. Claims 1-24 are presented for examination.

#### ***Drawings***

2. The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

#### ***Specification***

3. The disclosure is objected to because of the following informalities: the element numbers of Figure 5 in this specification are not corresponding to the element numbers as described in the drawings. Appropriate correction is required.

***Claim Objections***

4. Claim 2 is objected to because of the following informalities: the phrase "a computer program as claimed in claim 1" (line 12) should be a computer program product as claimed in claim 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cozza (U. S. Patent 5,502,815) herein referred to as Cozza in view of Waldin et al. (U. S. Patent 6,094,731) herein referred to as Waldin.

Regarding on Claims 1, 9 and 17, Cozza discloses a computer program product for controlling operation of a computer to detect malware (abstract), said computer program product comprising:

pending scan database code operable to maintain a pending scan database (RAM 19) storing data identifying computer files (files/volumes) that have been written to a data storage device (storing medium) and for which a scan for malware has yet to be performed (Fig. 2 and col. 3, lines 35-40); and

Cozza fails explicitly to disclose scanning code operable as a low priority task within a multitasking environment to conduct malware scanning upon computer files identified within said pending scan database.

However, Waldin discloses scanning code operable as a low priority task within a multitasking environment to conduct malware scanning upon computer files identified within said pending scan database (col. 1, lines 20-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the Waldin's invention with Cozza to provide scanning code operable as a low priority task within a multitasking environment as taught by Waldin with the motivation to allow quickly increasing the speed of scanning computer files and detecting viruses and malwares in computer files (col. 1, lines 15-20).

Regarding on Claims 2, 10 and 18, Cozza and Waldin disclose the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses file write code operable as a computer file is written to a storage device to add data identifying said computer file to said pending scan database (col. 2, lines 55- 67 through col. 3, lines 1-8).

Regarding on Claims 3, 11 and 19, Cozza and Waldin disclose the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses file read code operable in response to a read request for a computer file included within said pending scan

database to trigger said scanning code to scan said computer file as a high priority task before permitting read access to said computer file (col. 3, lines 45-55).

Regarding on Claims 4, 12 and 20, Cozza discloses the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses scanned file database code operable to maintain a scanned file database (cache 20) storing data identifying computer files that have been scanned for malware (col. 3, lines 35-40).

Regarding on Claims 5, 13 and 21, Cozza and Waldin disclose the limitations as discussed in Claim 4 above. Cozza further discloses wherein said data identifying computer files that have been scanned for malware includes checksum data derived from said computer files that were scanned (col. 3, lines 60-67).

Regarding on Claims 6, 14 and 22, Cozza and Waldin disclose the limitations as discussed in Claim 5 above, Cozza further discloses file read code operable in response to a read request for a computer file to detected if said computer file is within said scanned file database and a checksum value recalculated for said computer file matches that stored within said scanned file database before permitting said read request (col. 3, lines 45-67 through col. 4, lines 1-60).

Regarding on Claims 7, 15 and 23, Cozza and Waldin disclose the limitations as discussed in Claim 4 above, Cozza further discloses initiation code operable upon

Art Unit: 2135

startup to detect any computer files stored on a storage device not included within either said pending scan database or said scanned file database and to add such computer files to said pending scan database (col. 3, lines 35-55).

Regarding on Claims 8, 16 and 24, Cozza and Waldin disclose the limitations as discussed in Claim 1 above, Cozza discloses wherein said malware comprises one or more of: (i) a computer file infected with a computer virus; (ii) a Trojan; (iii) a banned computer file; and (iv) a computer file containing banned content (col. 2, lines 55-65).

### ***Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chess et al. (U. S. Patent 6,772,346 B1) discloses system and method of managing files in a distributed system using filtering.

Bates et al. (U. S. Patent 6,721,721 B1) discloses virus checking and reporting for computer database search result.

Nachenberg (U. S. Patent 6,851,057 B1) discloses data driven detection of virus.

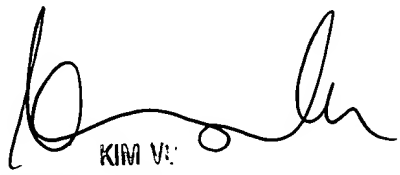
***Information Contact***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Tran N. To whose telephone number is 571-272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08/30/2005  
Patent Examiner  
Bao Tran N. To

  
KIM YU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER